

REMARKS

Claims 1, 33, and 43 have been amended, and claims 10 and 40 have been canceled in this amendment. Accordingly, claims 1 to 5, 7, 11 to 21, 25 to 27, 29, 32 to 34, 37, and 41 to 44 remain pending in this application. Applicants now address each and every point raised by the Examiner in the above-identified Advisory Action:

I. Rejection of Claims Under Section 103A. Independent claims 1, 14 and 33

The Examiner has commented that independent claims 1, 14 and 33 would be rejected under 35 U.S.C. § 103 as being allegedly unpatentable over GB 1,450,654 (~654). Here, the Examiner comments that the ~654 patent discloses using an Fe-Co-Ni binder with 5 to 10 percent by weight Co. However, Applicants are not sure whether the Examiner's comments regarding a possible rejection is based on the ~654 patent alone or in combination with the two other references previously relied upon in the final rejection, i.e., Heinrich and Fujita.

For purposes of this Amendment, Applicants are assuming that the Examiner's comments relate to the "further" combination of the ~654 patent along with the previously recited patents, as these have been relied upon earlier by the Examiner.

While the ~654 patent may disclose a binder comprising 5 to 10 percent cobalt, that is less than that mandated by Heinrich where at least 40 percent by weight cobalt is required.

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Therefore, Applicants believe that one skilled in the art would not be motivated by the combination of these two references to use less cobalt than required by Heinrich, i.e., Heinrich in fact teaches away from this proposition.

Further, the '654 patent discloses a cemented composition that is very different from that recited in Applicants' independent claims 1, 14 and 33. Claims 1 and 33 have been amended to include the claim feature (already recited in claim 14) that the binder alloy comprise in the range of from about 10 to 30 percent of the total cermet material. The '654 patent discloses a cemented composition having a binder content that is much less, i.e. in the range of from 3 to 9 percent by weight.

Thus, although the '654 patent discloses a cemented carbide composition that comprises a Fe-Co-Ni binder, it discloses one that has less binder than that being claims, and discloses using an amount of cobalt that is contrary to the mandated amount of at least 40 percent as required by Heinrich.

Accordingly, the Examiner's reliance on the '654 patent is one that appears to be based on a hindsight reconstruction of Applicants invention as recited in these claims, one that is not supported by the combination of the remaining references, and one that would not properly operate to motivate one skilled in the art based on the combination of references to make the low coefficient of thermal expansion cermet composition as recited in independent claims 1, 14 and 33.

Accordingly, for the reasons presented above, Applicants submit that its invention as recited in independent claims 1, 14 and 33 are not obvious over the combination of Heinrich, Fujita, and the '654 patent, and respectfully request that any provisional rejection of these claims, and the claims depending respectively therefrom under 35 U.S.C. § 103 be reconsidered and withdrawn.

B. Independent claim 25

Claim 25 recites a three phase low coefficient of thermal expansion cermet material; namely, one comprising a first phase of grains (e.g., a carbide), a second phase of binder alloy having a specified coefficient of thermal expansion, and a third phase comprising the first and second phases disbursed therein.

Applicants have stated before it its response of June 27, 2006 that neither Heinrich nor Fujita, alone or in combination, remotely disclose or suggest such three-phase cermet material, and for that reason its three-phase cermet material as recited in claim 25 was not obvious to one having ordinary skill in the art over the combination of Heinrich and Fujita.

In the Advisory Action, the Examiner concedes that neither Heinrich nor Fujita disclose or suggest a three phase cermet. However, the Examiner then goes on to conclude that, "lacking evidence to the contrary, the microstructure of the cermet produced by Heinrich in view of Fujita would be expected

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to be the same or similar to the instant invention since the compositions are the same or similar."

This Examiner's position here, however, is without support. First, as the Examiner has already conceded, neither reference alone or in combination disclose or remotely suggest a three-phase cermet construction. Thus, these references fail to disclose or suggest the formation of any three-phase cermet construction. Since this is the case, how is it possible for the Examiner to conclude that the cermet constructions disclosed in these references (again not three-phase cermet constructions) are the same or similar and would thus be expected to be the same or similar to the Applicants' invention.

The Examiner's provisional rejection of Applicants' three-phase cermet construction as recited in independent claim 25 is simply lacking in support, again as conceded by the Examiner. For these reasons, Applicants respectfully request that the rejection of independent claim 25, and the claims depending therefrom, under 35 U.S.C. § 103 be reconsidered and withdrawn.

C. Independent claim 43

The Examiner has commented that independent claim 43 would be rejected under 35 U.S.C. § 103 as being allegedly unpatentable over GB 1,450,654 ('654). The Examiner has provisionally rejected this claim for largely the same reasons noted above for independent claims 1, 14 and 33.

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Applicants, therefore, submit that its invention as recited in independent claim 43 would not be obvious to one having ordinary skill in the art based on the combination of Heinrich, Fujita and the '654 patent. Applicants, therefore, respectfully request that the rejection of independent claim 43, and claim 44 depending therefrom, under 35 U.S.C. § 103 be reconsidered and withdrawn.

II. Conclusion

For the reasons presented above, Applicants respectfully request that: (1) the Request for Continued Examination be granted; (2) the provisional rejection of the claims under 35 U.S.C. § 103 as presented in the Advisory Action be reconsidered and withdrawn; and (3) the claims pending in this patent application be passed to allowance. If, after evaluating this response, the Examiner does not believe that the claims are in allowable conditions, Applicants respectfully request that the Examiner please contact its below-identified patent attorney for the purpose of discussing the same.

The proceedings herein are for a patent application and the provisions of 37 C.F.R. 1.136 apply. Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

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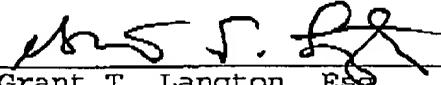
If any additional fees are necessary in this matter,
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Respectfully submitted,

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